

Serial No. 10/017,487

Docket No.: KCC-16,156

REMARKS

Applicants' undersigned attorney thanks the Examiner for the Examiner's comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1-75 are pending.

Amendment to the Claims

Claims 1-75 have been examined, with no claims being allowed. Applicants have amended Claims 1 and 24.

Claims 1 and 24 have been amended to clarify that the polymeric reactive compound (and catalyst, when present) is applied to a cellulose fiber that has previously been treated with an intra-crystalline swelling agent. Support for this amendment is provided throughout the specification, such as at page 8, line 17 – page 9, line 4, and page 12, lines 5-13.

No new matter has been added by this Amendment. No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims remains unchanged.

Claim Rejections - 35 USC §103

The rejection of Claims 1-75 under 35 USC §103(a) as being unpatentable over Herron et al. (U.S. Patent 5,137,537) is respectfully traversed.

Herron et al. disclose mechanically curled, individualized fibers that have been crosslinked with a C₂-C₉ polycarboxylic acid crosslinking agent reacted with the fibers to form intrafiber crosslink bonds.

Herron et al. do not disclose or suggest chemically treating cellulosic fibers with an intra-crystalline swelling agent to modify the super-molecular structure of the fibers, thereby imparting curl to the fibers, and subsequently applying a polymeric reactive compound to the *treated* cellulose fiber to create a high wet resiliency curly cellulose fiber, as recited in Claims 1, 24, and 47 of the present invention.

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Instead, the fibers of Herron et al. are mechanically separated, or "fluffed," to impart an enhanced degree of curl prior to crosslinking (Col. 7, line 66 – Col. 8 line 17). Herron et al. fail to disclose or suggest cellulosic fibers treated with an intra-crystalline swelling agent to chemically curl the fibers.

In Herron et al., a catalyst, such as sodium hydroxide, may be used to speed up the crosslinking process. However, Herron et al. fail to disclose or suggest treating the fibers with sodium hydroxide, or other substance that may serve as an intra-crystalline swelling agent, *prior* to applying the crosslinking agent to the fibers. Instead, when a catalyst is used, the catalyst is applied to the fibers either concurrently with the crosslinking agent, or subsequent to contacting the fibers with the crosslinking agent (Col. 11, lines 1-11; Example I). As with any catalyst, the catalyst in Herron et al. is necessarily applied in the presence of the reactant, i.e., the crosslinking agent (Col. 11, lines 14-20; Example I).

In contrast, the intra-crystalline swelling agent in the present invention is applied to the fibers and is subsequently washed away from the fibers, thereby forming curly fibers. After the intra-crystalline swelling agent has been washed away, the polymeric reactive compound is then applied to the fibers, as explicitly recited in Claim 47. Thus, the intra-crystalline swelling agent and the crosslinking agent are not mixed together in the present invention.

Because Herron et al. disclose sodium hydroxide as a catalyst, a person skilled in the art would not be motivated by the teachings of Herron et al. to apply sodium hydroxide, or any other intra-crystalline swelling agent, to a fiber to modify the super-molecular structure of the fiber to impart curl to the fiber *prior* to crosslinking the fiber.

For at least the reasons given above, Applicants respectfully submit that the disclosure of Herron et al. fails to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

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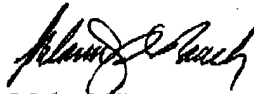
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Conclusion

Applicants believe that this case is now in condition for allowance. If the Examiner feels that any issues remain, then Applicants' undersigned attorney would like to discuss the case with the Examiner. The undersigned can be reached at (847) 490-1400.

Respectfully submitted,



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